DOCUMENT RESUME

ED 056 362 24 CG 006 832

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TITLE	Conditions Leading to the Use of Retaliation. Final Report.
INSTITUTION	Iowa State Univ. of Science and Technology, Ames.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO	BR-O-F-019
PUB DATE	Aug 71
GRANT	OEG-6-70-0017(509)
NOTE	30p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Behavioral Science Research; *Experimental Psychology; *Interpersonal Relationship; Motivation; *Reactive Behavior; *Reinforcement; *Rewards; Stimulus Behavior

ABSTRACT

Three separate laboratory studies were conducted to determine the conditions under which a person reciprocates a past favor and retaliates a past harm. The first study utilized the framework of equity theory (Adams, 1965) and predicted that when faced with inequity due to the generosity or stinginess of another, one means of reducing the inequity would be to reciprocate the other's generosity or retaliate his stinginess. It was concluded that people will reciprocate a favor and retaliate harm, but prefer situations in which reciprocation and retaliation are not needed. The 2nd and 3rd studies focused on the joint effects of the intentions and the actual behavior of helper (0) on the reciprocation and retaliation of person (P). The results showed reciprocation to be based solely on O's actual behavior, with no effect at all for O's intent. The 3rd study was carried out to test the reactance theory interpretation of the failure of O's intnetions to be reciprocated. The findings showed that both O's intent and the outcome of O's actual behavior were determinants of reciprocity, but that intent and behavior do not summate into a total level of reciprocity. (Author/TA)

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FINAL REPORT
Project No. 0-F-019
Grant No. OEG-6-70-0017 (509)

CONDITIONS LEADING TO THE USE OF RETALIATION

Arnold Kahn
Iowa State University
Ames, Iowa 50010

August 1971

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
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The research reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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PREFACE

This report contains the results of three complete studies. Study I differs greatly from Studies II and III in method and content, although all three studies concern reciprocation and retaliation. The findings from these studies will probably be more comprehensible if Study I is presented separately from Studies II and III. Therefore, the organization of this report will be somewhat different from most reports. Specifically, following a general summary, Study I will be reported in detail. Then Studies II and III will be reported. A general "conclusions and recommendations" section will then integrate and expand on the three studies taken together.

SUMMARY

Three separate laboratory studies were conducted to determine the conditions under which a person reciprocate a past favor and retaliate a past harm. The first study utilized the framework of equity theory (Adams, 1965) and predicted that when faced with inequity due to the generosity or stinginess of another, one means of reducing the inequity would be to reciprocate the other's generosity or retaliate his stinginess. One hundred-twenty subjects performed two tasks in dyads. On the first task the partner always divided the group earnings, while on the second task the subject was responsible for the division of the rewards. On the first task the partner divided the reward in one of three ways--overpaid the subject, divided equally, or underpaid the subject. In half the cases the partner was presented as less qualified than the subject, while in the remaining cases the partner was presented as more qualified than the subject. Half the dyads were composed of males, while the other half were female. On the main dependent measure, the division of the rewards on the second task by the subject, the equity theory prediction was confirmed in that previously overpaid subjects took less money for themselves and previously underpaid subjects took more money for themselves than equally paid subjects; however, a preference for equality as well as equity was noted in both the actual division of the rewards and questionnaire responses. Subjects' reciprocation and retaliation when dividing the rewards on task 2 were less extreme than would be predicted from equity theory, and subjects indicated a definite preference for equal divisions. Furthermore, whether the partner was qualified or unqualified had little effect on the dependent measures. It was concluded that people will reciprocate a favor and retaliate harm, but prefer situations in which reciprocation and retaliation are not needed. They therefore reciprocate and retaliate less than expected apparently in an attempt to bring about equality.

The second and third studies focused on the joint effects of the intentions and the actual behavior of helper or harm-doer (O) on the reciprocation and retaliation of person (P). From the writings of Heider (1958) and Jones and Davis (1965) it was predicted that reciprocation and retaliation would be based more on O's intent than on the outcome of O's actual behavior. In the second study three levels of O's intent were created (intend-to-help, intent absent, and intend-to-not-help) and two levels of O's actual behavior were manipulated (high help and low help). Half the subjects were later given the opportunity to reciprocate the same person who had previously helped him (Oa), while the remaining subjects were given the opportunity to reciprocate a stranger (Ob).

It was predicted that reciprocation would be based more on intent with respect to Oa than Ob. The results showed reciprocation to be based solely on O's actual behavior, with no effect at all for O's intent. Furthermore, reciprocation was more extreme in the Oa than the Ob condition. Questionnaire data indicated subjects in both the intend-to-help and the intend-to-not-help condition tried less hard and felt they did a poorer job than did subjects in the intent absent condition. That is, it appeared knowledge of O's intentions, regardless of the content of the intent, led subjects to become less involved in the situation and to ignore O's intentions altogether.

Since the findings from the second study were inconsistent with both past research and theory, the third study was undertaken to reconcile the discrepancy. One difference between the past research and the second study was the way in which O's intentions were conveyed to P. In past research P inferred O's intent from O's behavior and the situational constraints on the behavior. In the second study O stated his intentions to P directly. It was hypothesized that O's statement of intent directly to P put pressure on P to reciprocate O's intent, and that subjects reacted against this pressure by deciding to ignore such intentions altogether in deciding the extent of their reciprocity. Such an effect can be derived from Brehm's (1966) reactance theory, which states that people like to have the freedom to choose their behavior freely, and that activity by another to restrict this freedom will be met with resistance.

The third study was carried out to test the reactance theory interpretation of the failure of O's intentions to be reciprocated. The third study was identical to the second study except the intention manipulation was conveyed in such a way that P believed O to be unaware of P's knowledge of O's intent. The findings showed that both O's intent and the outcome of O's actual behavior were determinants of reciprocity, but that intent and behavior do not summate into a total level of reciprocity. Rather, positive intentions lead P to create a situation for O such that O is more likely to succeed, but direct help-giving to O appears more a function of amount of help previously received from O.

Together, the three studies indicate that people prefer a situation in which reciprocity and retaliation is not needed. That is, a situation where justice prevails such that rewards were divided equally among participants. When inequality occurs reciprocation and retaliation will take place, but to a lesser extent than would be expected by some theories. Furthermore, the intentions of the actors involved are important in determining the amount of reciprocation and retaliation. When the other's intentions are learned in such a manner that a person's freedom to decide how to behave is not threatened, reciprocation will be based at least in part upon these intentions; however, to the extent knowledge of the other's intent restricts a person's freedom to behave, the knowledge of intentions will be ignored.

STUDY I

Reactions to Generosity or Stinginess from an Intelligent or Stupid Work Partner: A Test of Equity Theory in a Direct Exchange Relationship[1]

INTRODUCTION

Equity theory (Adams, 1963; 1965) maintains that individuals in a work situation compare their profits with others. More specifically, a state of equity exists when a person (P) perceives his ratio of inputs to outcomes proportional to the ratio of a comparison person (O). Inequity results when the ratios are not perceived as proportional. Inequity is conceived as an aversive motivational state which P will attempt to reduce by altering his own or O's inputs or outcomes, or by distorting his perceptions. In most exchange relationships inputs refer to experience, training, and effort directed at the task, and outcomes include rewards gained such as salary and status.

Most research testing equity theory has focused on the employer-employee relationship, where the employer hires the employee, P, to work at either a piece-rate or hourly wage for which P is underqualified, qualified, or overqualified (Adams, 1965; Lawler, 1968; Pritchard, 1969). The typical dependent measure (inequity reduction) has been job performance. The nature of the comparison person, O, has not been clearly specified. Usually, O is a hypothetical person who is equitably paid, or P, himself, in an assumed past job situation in which he had been equitably paid.

The present study was designed to test equity theory predictions in a situation in which P and O work together and where both of them have control over the division of the outcomes. This kind of situation will be termed a direct exchange and it includes many types of situations from bargaining over the price of goods or services to be exchanged to the exchange of gifts or favors between lovers. In a direct exchange situation the nature of O is less ambiguous, being the other person with whom the exchange is taking place, and inequity reduction can occur not only through task performance, but also by manipulating P or O's outcomes. Behaviors such as reciprocity and retaliation can also be examined in this context (Adams, 1965, p. 278).

A series of studies by Leventhal and his colleagues has shown that people do allocate rewards to one another in accordance with the equity formulation: when inputs were equal, P increased his outcomes if he was underpaid, and decreased them if he was overpaid (Leventhal & Bergman, 1969; Leventhal, Allen, & Kemelgor, 1969). Furthermore, when overreward occurred intentionally by O, P was more likely to decrease his outcomes to a greater extent than if the overreward occurred by chance, although O's intentions did not affect reallocation of outcomes when P was underrewarded (Leventhal, Weiss, & Long, 1969). Leventhal and Michaels (1969) found that when P worked longer than O and produced the same amount as O, P took less than half of the reward; but when O worked longer than P and produced the same amount as P, P took more than half of the reward.

A number of studies dealing with helping behavior in a direct exchange, while not derived from equity theory, have found results consistent with the theory -- greater help is given to O the more P has been previously helped by O (e.g., Frisch & Greenberg, 1968; Goranson & Berkowitz, 1966; Greenglass, 1969; Pruitt, 1968).

The present study was designed to be a more direct test of Adams' model in a direct exchange situation. Three payment conditions were

created -- overpaid by O (generosity), equally paid by O, and underpaid by O (stinginess) -- after performance on task one. Subjects then worked on a second task for which they were responsible for dividing the rewards between O and themselves. Since task performance was manipulated so that both P and O performed equally well, equity theory would predict subjects would keep the most money for themselves when they had previously been underpaid by a stingy O, and keep the least amount for themselves when they had been previously overpaid by a generous O. In addition, half the subjects were led to believe O was highly qualified for the job, and the other half that O was poorly qualified. It was predicted subjects would keep more money for themselves in all payment conditions when O was poorly qualified. The third variable, sex of subjects, was included since past research (Kahn, Hottes, & Davis, 1971; Markwell, Ratcliff, & Schmitt, 1969; Vinacke, 1959), has indicated males are more concerned with financial gain, while females are more desirous of maintaining harmonous relationships. It was therefore predicted that males would take more for themselves than females with both generous and stingy Os.

Method

Pairs of subjects participated in an "individual versus group performance" study. Subjects first worked as a group on a proofreading task, and then worked individually on two additional proofreading tasks. On the first individual task O always divided the group earnings, while on the second individual task the subjects had an opportunity to distribute the earnings. The division of money on the second individual task was the main dependent variable. The independent variables -- amount kept by O on the first individual task, qualifications of O, and sex of the subjects -- composed a 3 x 2 x 2 factorial design. A total of 120 undergraduates (60 males and 60 females) participated in the study in like-sex pairs. Subjects received both credit toward their introductory psychology grade and money for their participation.

Procedure

As each S arrived he was placed in a separate room and given a "Past Background in English" (PBE) form to complete. When both Ss had completed the forms they were brought together in one room and introduced. If Ss indicated prior acquaintance with one another the experiment was terminated. They were informed the study involved determining whether people worked better in groups or as individuals and whether this varied with the ability of the individuals. It was further explained that the tasks involved ability in English composition, specifically proofreading paragraphs, and that the PBE form they had completed was a measure of that ability. Ss were told they would first work together in a group and then separately as individuals, and that in order to motivate them to work hard they would be paid on the basis of how well they performed as a group. It was explained that both quality and quantity were important. Instructions for the group task were then distributed. After they had read the instructions a panel of lights in front of the Ss was brought to their attention. They were told that when the blue light comes on a timer would be activated and they were to begin, and that when they were finished they were to flip a switch which would stop the timer. The group task was then distributed. E entered a control room, activated the blue light, and waited for the signal that they had completed the task. When Ss signaled they were finished E collected the task and quickly scored it. He announced they had

detected a total of ___ errors in ___ minutes and ___ seconds. He continued, "For this level of performance you have earned 90 cents. Since you worked together I'll just give you each 45 cents. OK?" Ss were then paid. E then said it was time for them to work as individuals, that they would be working in separate rooms on the same tasks, and that they would again be paid as a group. E explained that there would be two individual sessions and that a coin toss would determine who would be first to divide the earnings. E then escorted one S to another room which also contained a panel of lights, passed out the second task, and activated the blue light. When both Ss indicated they had completed the task, E collected them and told each S he would be back as soon as he had scored the paragraphs. At this point E also handed each S a copy of his partner's (O)'s PBE form stating, "While these are being scored I thought you might be interested in seeing the kind of background in English your partner had." This constituted the manipulation of O's qualifications and will be explained below. E "scored" the paragraphs, went to one S and collected his partner's PBE form, and flipped a coin, asking S to "call it." S always lost the flip and was told "I guess you'll get to divide the money the next time. I'll be back as soon as your partner has indicated how he'll divide the money." E then went to the other S and announced that the first S had won the coin toss and handed him a form alledgedly showing how his partner had divided the earnings. E paid S, returned to the first S and handed him a similar form showing how his partner had divided the earnings and paid him. Thus each S was led to believe O had divided the earnings on the first individual task and this constituted the payment conditions manipulation which will be fully explained below. Ss then completed the second individual task. E gave each S their "scores" for the second task and stated that together they had earned $1.12. The performance report indicated both Ss had performed equally well -- one S always detected a few more errors, but took a few more seconds to do so. After each S indicated how he wanted to divide the money he was paid and given a questionnaire to complete. After completion of the questionnaire both Ss were brought together, questioned, and then informed about the nature of the experiment. During the questioning no subject indicated he thought the study involved equity, retaliation, reciprocation, etc., nor did any subject indicate awareness that he had been deceived. Earnings were slightly redistributed so that each subject went away with $1.50, and Ss were requested not to discuss the study until the end of the quarter.

Task

Each proofreading task consisted of a typed page containing approximately 125 words of text. Subjects were instructed to circle each error they detected. A portion of one of the tasks is as follows: "A comunnity must solve the problem of the family by revizing certain established practic. Thats absolutely enevitible." Each task contained approximately fifty errors of spelling or punctuation. Subjects generally took between three and four minutes to complete each task and the time between the partner's qualifications manipulation, which occurred prior to the first individual task, and the opportunity to retaliate or reciprocate, which occurred after the second individual task, was no more than twelve minutes.

Manipulation of Independent Variables

Qualifications of O was manipulated by the bogus PBE forms passed out

prior to the earnings division on the first individual task. In the highly qualified condition O "indicated" he was a 21 year-old, junior, English major with a 3.62 grade point average. He had taken nine English courses in which he had received seven A's and two B's, and was currently enrolled in two English courses. He indicated he read from 7 to 9 books a quarter that were not assigned and considered himself "much better" than others his age in grammar ability. In the poorly qualified condition O "indicated" he was an 18 year-old, freshman, physical education major with a 1.42 grade point average. He had taken two English courses in which he had received D's. He indicated he read from one to three unassigned books per quarter and considered himself "a little worse" than others in his grammar ability.

Payment conditions were manipulated by the division of the earnings by O on the first individual task. As on the second individual task, Ss were informed they had performed at about the same level as their partner. In the overpay condition Ss were informed that as a team they earned 98 cents and that O had given them 75 cents and had kept 23 cents for himself, and each S was given the 75 cents. In the equal pay condition Ss were informed O had divided the money equally and each S was paid 49 cents. In the underpay condition Ss were informed O had given them 23 cents and kept for himself 75 cents, and each S was given 23 cents.

Results

Success of Manipulations

Two questions, answered on 9-point rating scales, were used to assess the effectiveness of the qualifications of partner manipulation. On both the first question -- "How good do you think the other person is at proofreading?" -- and the second question -- "Who do you think was better at proofreading?" -- there were sizeable main effects for qualifications in the expected direction (F = 65.62 & F = 44.10 respectively; df = 1/108; p's $<$.001).

Perception of equity was assessed by the question, "How fair was the division of the reward when the other person divided the money?" Ratings were on a 9-point scale from 1, I got too much, to 9, he got too much. A significant difference emerged for payment conditions (F = 168.02; df = 2/108; $p <$.001) and the means are presented in Table 1. A Newman-Keuls analysis showed each payment condition to be significantly different from one another at greater than the .01 level for both males and females. A significant interaction of sex by payment conditions occurred (F = 5.10; df = 2/108; $p <$.01) and appears due to the underpay condition where males felt significantly more strongly that O got too much money than did females (see Table 1). No main effects or interactions were found for O's qualifications.

Amount of Money taken for Self

It was predicted that Ss would keep the most money for themselves in the underpay condition and least for themselves in the overpay condition, and that males would keep more for themselves than females. The data pertinent to these predictions are presented in Table 2. The equity theory prediction was strongly supported (F = 74.82; df = 2/108; $p <$.001) with

each payment condition significantly different from one another at the .05 level for each sex. The overall sex effect was not significant ($F = 2.50$; $df = 1/108$; $p < .20$), however, a Newman-Keuls analysis showed males kept more for themselves in the underpay condition than females ($p < .01$).

A third prediction was that Ss would keep more money for themselves when O was poorly qualified than when he was highly qualified. No support was found for this prediction. The main effect for qualifications yielded an F-ratio of less than 1.0, and inspection of means showed no difference due to O's qualfications for any of the three payment conditions. The three-way interaction, however, was significant ($F = 4.31$; $df = 2/108$; $p < .05$) and is illustrated in Figure 1. Males were more likely to reciprocate the generosity of the poorly qualified O and to retaliate his stinginess; females tended to reciprocate the generosity of the highly qualified O and retaliate her stinginess. However, individual comparisons revealed no significant differences due to O's qualfications for either sex within any payment condition.

Other Questionnaire Data

The post-experimental questionnaire contained eleven questions. Three of these have already been discussed under "Success of the Manipulations." Responses to the questions, "How hard do you think the other person worked on the individual tasks," and "How much do you like the other person," yielded nearly identical findings. For both measures the only statistically significant finding was the three-way interaction ($F = 3.89$; $df = 2/108$; $p < .05$; and $F = 3.73$; $df = 2/108$; $p < .05$). Males liked O more and felt he worked harder when he divided the money equally on the first task. When overpaid, males liked the poorly qualified O better and felt he worked harder; when underpaid, males felt the highly qualified O worked harder, but showed no difference in liking. Females, on the other hand, showed nearly the opposite reaction. When overpaid, they liked the highly qualified O more, but showed preference for the unqualified O in the equal and underpay conditions. This pattern was approximated on perception of how hard O worked. They felt that the highly qualified O worked harder when she was generous, that the unqualified O worked harder in the equal pay condition, and no difference in the underpay condition.

For the question, "How fair was the division of the reward when you divided the money?" a significant main effect emerged for payment conditions ($F = 16.23$; $df = 2/108$; $p < .01$) showing initially overpaid subjects felt they received too little and initially underpaid subjects felt they received too much. The question, "How hard did you work on the individual tasks?" yielded no significant effects.

Three questions concerned perceptions of performance on the group task (how hard did you work, how hard do you think the other person worked, and how fair was the division of the reward). Responses to these questions essentially mirrored those for the perceptions of performance on the individual tasks presented above.

A final question, "How concerned were you with the financial aspects of this project?" revealed males more concerned than females ($F = 5.76$; $df = 1/108$; $p < .05$).

Discussion

Although the basic prediction from equity theory was supported -- a generous O's generosity was reciprocated and a stingy O's stinginess was retaliated -- the data produced two deviations from the theory. The effects of O's qualifications had only minor consequences for subject's behaviors, and reciprocation and retaliation were less than predicted by the theory.

Adams (1965) states inputs refer to a person's "education, intelligence, experience, training, skill, seniority, age, sex, ethnic background, social status, and . . . effort he expends on the job (pp. 276-277)." The manipulation of inputs in the present study included five of these (education, intelligence, training, skill, and age). That these were perceived by subjects is attested to by the significant differences found for the questions assessing how good O was at the task -- the qualified O was seen as a better proofreader than the unqualified O. According to equity theory, the greater O's inputs the greater O's outcomes should be, and therefore, subjects should have kept less money for themselves when working with a highly qualified O than an unqualified O in each of the three equity conditions. No such effect was found for any of the payment conditions. When the data were further broken down by both sex and payment conditions, the predicted effect still did not obtain for any of the six comparisons.

It might be that since O performed at approximately the same level as the subject on both individual tasks, he was seen as not putting out as much effort in the qualified condition, and working very hard in the unqualified condition. However, on the question assessing how hard subjects thought O worked, no effects due to O's qualifications were found. Likewise, the question assessing perception of the fairness of the reward division when O divided the money yielded no effects for qualifications.

Qualifications may have had less of an impact than predicted because at the time of reward distribution information concerning task performance was before subjects but qualification information was not. This, combined with the fact that subjects were probably preoccupied with getting even with O, probably reduced the salience of qualifications. The fact that the experimenter divided the rewards on the group task on the basis of performance and not PBE may also have contributed to the failure to obtain the predicted results.

For whatever reason it seems clear that the qualifications manipulation was perceived by subjects,but not taken into account when allocating outcomes. Hence, it was not considered relevant to the exchange. Given this state of affairs, subjects should prefer an equal division of the rewards, and this is what was found. Subjects liked O more when he divided the rewards equally than when he was generous ($t = 1.69$; $df = 38$; $p < .10$) or when he was stingy ($t = 2.36$; $df = 38$; $p < .05$). Furthermore, when O divided the money equally, thirty-nine of the forty subjects also divided the money equally on the second task.

A closer look at the data suggests an even greater preference for equality than needed to maintain equity. On the first task the generous O kept 24% of the reward for himself, so that to maintain equity the sub-

jects should have kept only $.27 for themselves on the second task. Subjects actually kept $.39 for themselves, an amount about half-way between equity ($.27) and equality ($.56). The stingy O kept 76% of the reward for himself, and to maintain equity subjects should have kept $.85 for themselves on the second task. In fact, these subjects kept $.69, again an amount half-way between equity ($.85) and equality ($.56). These deviations towards equality may represent some form of constant error in subjects' judgments; however, taken with the liking for partner data, it might also suggest the outcome of a conflict between an equal division, which they prefer, and reciprocation or retaliation, which is equitable. This is substantiated by the responses to the question about the fairness of the reward division on the second task, where subjects indicated greatest fairness when they divided the money equally. When they kept more for themselves in the O-stingy condition they indicated they got too much for themselves on the second task, even though they retaliated less than predicted by equity theory. Parallel results were obtained in a O-generous condition, where subjects felt O got too much on the second task.

A similar preference for equality or at least a diminished tendency to achieve equity, can be found in the research of Morgan and Sawyer (1967) and Leventhal and Michaels (1969). Morgan and Sawyer found that when high school students had to achieve an agreement as to reward division when the reward potential of one student was five times higher than the potential for the other student, equal division agreements were reached rather than equitable ones, even when the boys were not friends, and when the person who had the higher grades had the higher reward potential. Leventhal and Michaels varied the duration and quantity of subjects' performance independently such that some subjects found they worked either 35% or 65% of the time and contributed either 35% or 65% of the quantity compared to partner. While subjects took more of the total reward for themselves when they worked 35% of the time and contributed 65% of the quantity (relative to partner who worked 65% of the time and contributed 35% of the quantity), the amount taken was far less than equity theory would predict. If subject and partner had worked an equal amount of time and subject contributed 65% and partner 35% to the task, then the subject should take 65% of the reward to achieve equity. The fact that the subject worked a much shorter time and still contributed 65% implies that he should have kept an even higher proportion for himself. Leventhal and Michaels' subjects, however, kept only 60.62% of the reward for themselves in this condition. Similarly, when subjects worked for 65% of the time but contributed only 35% to the task they took far more (39.06%) than would be predicted by equity theory.

The major difference between the present study and the studies by Morgan and Sawyer (1967) and Leventhal and Michaels (1969) on the one hand, and the majority of equity studies, appears to be the nature of the exchange relationship. In the three aforementioned studies, the exchange relationship between P and O was direct, while in each of the thirteen studies reviewed by Pritchard (1969) the exchange between P and O was mediated by an employer. None of the studies reviewed by Pritchard suggests either a tendency to disregard input differences between P and O, or a preference for equality over equity. The notion that equality might be preferred to equity is, in fact, suggested by Adams (1965) in discussing exchanges other than with an employer. He stated, ". . . in vast array of social relations reciprocity is a functional element of the relation. What

is in fact referred to by reciprocity is equality of exchange (p. 278, italics added)." However, Adams does not discuss why equality should be the rule in direct exchanges.

One reason for this preference for equality in direct exchanges may be a desire to maintain a relatively equal status relationship and assure continuation of a profitable exchange. Thibaut and Kelley (1959) have shown that when outcomes of group members are public, status comparisons can easily be made. One consequence of status distinctions is to hinder communication between persons of different statuses and to lead to cliques and subgroupings within status levels (Kelley, 1951; Torrance, 1955; Hurwitz, Zander, & Hymovitz, 1960; Stroðtbeck, Simon, & Hawkins, 1965). Thus status distinctions can potentially disrupt an exchange. If two persons are in a direct exchange, and they find their outcomes better than those in alternative relationships (what Thiabaut and Kelley [1959] call comparison level for alternatives), their main concern is to keep the relationship going. To focus on differences in inputs and to demand equity would make the status discrepancy more salient and might threaten the existence of the relationship.

Pritchard (1969) has also made a distinction as regards the amount of psychological distance in the exchange relationship. Two persons working for each other (direct exchange) are closer, psychologically, than in the typical equity study in which a person compares with a hypothetical other and there the outcomes are controlled by a third person, the employer. Pritchard predicts that differences in inputs and outcomes are easier to perceive and more salient the more intimate the relationship. "Assuming this greater sensitivity to differences is ratios as the relationship between the two people is closer to the intimate end, and assuming that there is less direct correspondence between the two people's ratios as the relationship moves toward the impersonal end, it would seem less likely that person will experience inequity relative to the other person in the relationship the closer the relationship is to the impersonal end of the continuum (Pritchard, 1969, p. 206)."

The arguments of Pritchard and those advanced in the present study are obviously at odds. Pritchard argues that the ease of comparison in a direct exchange leads to heightened sensitivity to differences in greater feelings of inequity, while we propose that desire to maintain a profitable relationship in a direct exchange will lead to discounting of differences to preserve equal status. The data from the present study cannot be taken as support for the point of view presented here, since the data preceded the theory. What is needed are studies in which the "psychological closeness" or the "directness" of the exchange is systematically varied, together with differences in the inputs between P and O.

FOOTNOTES

[1]This study has been accepted for publication in the Journal of Personality and Social Psychology.

STUDY II

Returning a Favor and Retaliationg Harm:
The Effects of Stated Intentions and Actual Behavior

INTRODUCTION

Recently there has been much work on altruism and helping behavior based on the theories of equity (Adams, 1965), reciprocity (Gouldner, 1960), and social responsibility (Berkowitz & Daniels, 1963). Concurrent and often in conjunction with the work of altruism, has been research focused on the inference of motives by a person who is helped or hindered by another. This latter research has often been based on the attribution theories of Heider (1958) and Jones and Davis (1965). All this work generally centers around a situation in which a person (P) is either helped or hindered by another person. Aid is later requested of P by two types of O's: the other person initially involved in the exchange (A) or a person not initially involved in the exchange (B). The results of this research as regards helping behavior may be summarized as follows: (1) prior help from A to P results in reciprocation to A by P (Frisch & Greenberg, 1968; Goranson & Berkowitz, 1966; Greenberg, Black, & Silverman, 1971; Wilke & Lanzetta, 1970); (2) prior help from A to P results in P later helping B (Berkowitz & Daniels, 1964; Greenglass, 1969; Nemeth, 1970);[1] (3) prior hindrance or refusal of aid by A to P leads to little or no help given to A by P (Wilke & Lanzetta, 1970); (4) prior hindrance or refusal of aid by A to P results in little or no help given to B by P when B is similar to A, but not when B is dissimilar to A (Greenglass, 1969); (5) volutary help from A to P leads to more help given to A or B by P than when the help from A is compulsory (Frisch & Greenberg, 1968; Goranson & Berkowitz, 1966; Nemeth, 1970);[1] and (6) voluntary hindrance or refusal to help P by A does not lead to less help given by P to B than when the refusal by A was compulsory (Nemeth, 1970)[2].

The research summarized above suggests that, consistent with the theories of Heider (1958) and Jones and Davis (1965), P takes into account the situational constraints under which A is operating in reciprocating A's prior help. While often the intentions of A must be inferred by P, there are many situations in which A overtly states his intent. When the stated intention and the outcome of A's behavior are congruent (A states he intends to help and actually provides help, or A states he intends not to help and actually provides no help) P's situation is simpler than when the intention had to be inferred, for when the intention had to be inferred P may question the accuracy of his inference. However, when the stated intention and the outcome of A's behavior are not congruent (A states he intends to help but actually provides no help, or A states he intends not to help but actually does help) P is faced with additional problems, since he must decide whether to reciprocate A's intent or A's behavior. To the extent A's stated intent is taken by P to be truthful, Heider has stated P will reciprocate on the basis of intention rather than the outcome of A's behavior.

An everyday fact is that the feelings of both revenge and gratitude become markedly attentuated, if not completely dissipated, upon the discovery that the harm or the benefit was not the true goal of the agent. We do not feel grateful to a person who helps us fortuitously, or because he was forced to do so, or because he was obliged to do so. Gratitude is determined by the will, the intention, of the benefactor. Attribution to source and intention has similar significance in the case of revenge (Heider, 1958, p. 265).

Research by Frisch and Greenberg (1968), Goranson and Berkowitz (1966),

and Nemeth (1970) have provided support for Heider's (1958) analysis with regard to inferred intent. The Study II hoped to extend the field to embody stated intent as well. Three levels of intent by A were transmitted to P (intend-to-help, intend-not-to-help, and a control in which no intent was transmitted). After performing a task on which A's help was needed, P received information about how much help she actually received (high or low help). Half the subjects in each condition were given the opportunity to reciprocate A, while the remaining subjects were given the opportunity to help B, a person not involved in the initial P-A exchange. In line with Heider's (1958) analysis, it was predicted that when given the opportunity to reciprocate A, P would do so primarily on the basis of A's stated intent. However, when the person needing help was B, it was predicted P would reciprocate more on the basis of the actual behavior she had received from A than on the basis of A's intent. The reasoning behind this prediction was that P, not knowing the intentions of B, could not possibly reciprocate them. More salient for P at this time would be what actually happened to her. If she had been helped previously, then either because of the norm of social responsibility (Berkowitz & Daniels, 1963) or the norm of reciprocity (Gouldner, 1960) she should help a dependent B. When given little prior help by A these norms should be less strongly aroused and P should be less willing to help.

METHOD

Design and Subjects

One hundred twenty female undergraduate volunteers from introductory psychology courses at Iowa State University were randomly assigned to one of the 12 cells in a 3 x 2 x 2 factorial design. The independent variables were A's intent (intent-to-help; intent-to-not-help, or intent absent), A's actual behavior (high or low help), and whether P had the opportunity to reciprocate the person she had previously worked with (A) or another person (B).

Procedure and Manipulations

Subjects were run two at a time; however, each subject believed she was part of a triad. The third "subject" was a pre-recorded voice played over a tape recorder. As each subject arrived she was greeted by the experimenter, placed in a small room containing a chair, table, pencil, microphone, and loudspeaker, and asked to wait until the other girls arrived. A couple minutes after both subjects had arrived and been placed in their separate rooms a pre-recorded orientation[3] was played through the loudspeakers into each room. The recording explained that the study was one on the ability of people to take supervisory and worker roles in a factory situation and to discover the traits and abilities possessed by good supervisors and good workers. Subjects were told there were a number of jobs involving both the supervisor and a worker, and that each subject would be a supervisor once and a worker once. The experimenter then distributed some biographical and personality-type questionnaires. These questionnaires were part of the experimental ruse and were not scored.

After the questionnaires were collected, the pre-recorded instructions continued, explaining that the situation was set up to duplicate an actual factory situation: the supervisor could talk to the worker but the connec-

tion between the worker's microphone and the supervisor's speaker was broken so the worker could not talk back, and the worker would be "paid" on the basis of how well she performed. Subjects were informed they would be "paid" from one to five research credits depending on their performance and, since there were three persons present, one person would be left out on each task. Each of the two subjects were informed that she was to be the worker first that subject 3 (fictitious) was to be supervisor first. Hence, each subject believed she was to be the worker. After a few minutes delay, during which time the experimenter was presumably giving subject 3 her instructions as to her supervisory functions, each subject was given a copy of the first task.

Intention Manipulation and Task II. A female confederate had previously recorded three sets of instructions to be given to the subjects presumably from her "supervisor". Each pair of subjects heard either an intent-to-help, intent-to-not-help, or a intent-absent set of instructions. Each instruction set contained the following four parts:

(a) A short statement of the supervisor's experience and general attitude toward the experiment. In the intent-to-help and intent-absent conditions this consisted of, "I've never been a supervisor before. Well, here goes." In the intent-to-not-help condition the supvervisor said, "I've never been a supervisor before, and I don't feel much like being one, either. I doubt if you'll get many points working for me."

(b) A description of the task. This was the same in all conditions. The supervisor informed the subject she was a proofreader for a large publishing firm and she was to work paragraph-by-paragraph circling certain letters. The supervisor further explained that each page was to be separately timed.

(c) The presence or absence of a "hint" on how to obtain a high score. In the intent-to-help condition the supervisor added at the end of the task description, "Let me give you a hint. You'll have to circle a vowell and a consonant on each page. Concentrate on circling the vowell that I tell you to circle and forget about the consonant." In the intent-to-not-help condition the supervisor said instead, "That prof said that I could give you a hint if I could think of one. But I'm not about to waste my time trying. Let's just get this over with." In the intent-absent condition there was no mention of the possibility of a hint.

(d) Administration and pacing of the task. The proofreading consisted of five pages with each page containing a paragraph of from 150 to 270 words. A different consonant and a different vowell were asked to be circled for each page. The subjects were given 15 seconds per page, far too short to allow them to complete any page.

As soon as the subjects had completed the task, the experimenter collected the booklet and handed each girl a questionnaire called "Worker Form" to be filled out while her performance was being assessed. The questionnaire consisted of five questions, including a check on the effectiveness of the intention manipulation.

Actual Help Manipulation. The amount of help actually received from A was determined by feedback on her performance given by the experimenter to the subject. In the high help condition subjects were told that, "As

a team you and your supervisor actually did very well on the task. Your supervisor, Subject #3, did an especially outstanding job. However, you were the worker on the first task, so you are the one who gets the points. As a worker you earned the maximum possible number of research credits--five." Subjects in the low help condition were told, "As a team you and your supervisor didn't do very well on the task. Your supervisor, Subject #3, did an especially poor job. However, you were the worker on the task, so you are the one who gets the points. As worker, you earned the minimum possible number of research credits--one.

Opportunity to Reciprocate A or B. After learning of her performances as worker, each subject was told that she now was to reverse roles. Both of the subjects were told either that subject #3, who had previously been each worker's supervisor, would now be the worker, or that each subject's worker would be the "other" subject who had not been involved in the first task.

Dependent Measures and Task II. Each subject was approached individually by the experimenter and told that her first job as supervisor was to select how difficult a task she wished her worker to perform. She was told there were seven possible jobs, with the easiest being Number 1 and the hardest being Number 7. It was assumed that the subject would feel she would be helping A or B more, the easier the task chosen. The level of difficulty chosen was the first measure of reciprocity.

Regardless of the level of difficulty chosen, the instructions to the subject were identical, requiring the subject to "supervise" her worker by reading a series of sentences instructing her worker in the construction of an "aircraft component" made from Tinker-Toys. Each subject had five minutes to read these instructions. At the end of the period, the experimenter gave each subject a second questionnaire called "Supervisor Form" containing items intended to measure the subject's perceptions of her supervisory experience.

After the subject had completed the questionnaire, the experimenter returned to her room with a half-completed Tinker-Toy cube which he stated was "the product of your worker's performance." On the basis of this sample of her worker's performance, the subject was asked to award her worker from one to five introductory psychology participation credits. The number of credits that the subject awarded her worker was the second measure of reciprocation.

Debriefing. Following the allocation of credit to her "worker", by each subject the experimenter asked each subject, individually a number of open-ended questions including, "What was the experiment about?" and "What was the purpose of the experiment?" It was assumed that if the subject did perceive the true purpose of the experiment her responses would include some variant of the reciprocity concept. No subject, however, gave any indication of this being the true purpose.

The subjects were also asked to identify who was their supervisor in the first part of the study, and who was their worker in the second part. All subjects correctly made this indentification.

The experimenter explained the deceptions involved and the reasons for them. All subjects were awarded two research credits and all questions were answered. Subjects were asked not to discuss the experiment until the end of the quarter.

RESULTS

Effectiveness of the Intention Manipulation

The effectiveness of the intention manipulations was assessed by the question, "To what extent do you feel your supervisor tried to be helpful?" embedded in the Worker Form questionnaire and answered on an eight-point scale with only the ends anchored.[4] The main effect for intention was significant and the means were in the expected direction ($F = 13.88$, $df = 2/108$, $p < .001$; $\bar{X}_{help}=4.47$, $\bar{X}_{intent\ absent}=3.50$, $\bar{X}_{not\ help}=2.02$). Posttest analysis by means of Newman-Keuls test revealed each mean significantly different from others beyond the .05 level. Another question on the Worker Form, "How hard do you think your supervisor worked on the task?" also yielded a significant intention effect ($F=3.87$, $df=1/108$, $p < .05$; $\bar{X}_{help}=2.95$, $\bar{X}_{no\ intent}=2.52$, $\bar{X}_{not\ help}=1.62$). Newman-Keuls analysis showed the intent to not help meant to be significantly different from the other two beyond the .05 level of probability; however, the intent to help and intent absent means were not significantly different. The three other questions on the Worker Form did not display any significant effects due to intention.[5]

Reciprocity

There were two measures of reciprocity, the difficulty or ease of the task selected and the number of credits assigned for the finished product. While not initially hypothesized, it occurred to the authors while conducting the study that reciprocation of intent would more likely show up prior to the task (i.e., the task selection measure), since it appeared more indicative of the supervisor's attempts to be helpful. Reciprocation of actual behavior would more likely occur on the credit assignment measure, a more direct way of helping.

The first measure of reciprocity, difficulty of task selected for the worker, yielded no significant effects. The second measure, number of credits assigned, showed a significant main effect for actual help received ($F=30.58$, $df=1/108$, $p < .001$) and a significant interaction of prior help received with the target of reciprocity ($F=4.01$, $df=1/108$, $p < .05$). These results, presented in Table 3, show that high prior help led to a greater number of credits assigned than low prior help, and that the reactions to amount of prior help were more extreme when the target of aid was A, the prior helper, the B, a stranger. The effect of A's intention was not significant ($F=0.85$).

The two measures of reciprocity were uncorrelated ($r=-.04$).

Supervisor Form Responses

The Supervisor Form was presented to subjects after they had played the supervisor role but prior to their giving credits to their worker. It attempted to assess their perceptions of their performance as supervisor.

Table 4 presents the major findings. Subjects felt they tried harder to be a good supervisor (question 1), did a better job (questions 2), found the task more enjoyable (question 3), and tried to be more helpful to their worker (question 4) when they received no intention manipulation. In no case did the intent-to-help and intent-to-not-help conditions differ.

There were few other significant effects for these variables. On question one there was a significant effect of amount of prior help (F= 5.02, df=1/108, $p < .05$) showing a greater attempt to be a good supervisor with prior low help ($\bar{X}$=5.77) than with prior high help ($\bar{X}$=5.15). The only other significant effects were 3-way interactions ($p < .05$) for questions one and four. The pattern for the interactions were different in each case, and together appear uninterpretable.

DISCUSSION

Contrary to expectations, the results suggest the intent of a prior helper does not effect reciprocation. When given the opportunity to reciprocate prior aid, reciprocation appeared based solely on amount of aid previously received, with the effect being stronger when the person to be reciprocated (O) was the one who had previously helped the subject (P). Although not directly affecting reciprocation, the other's intentions did effect P's perception. Responses to the Supervisor Form revealed a significant effect for O's intention on three of the four items (see Table 3). It will be recalled that this form was completed between the two measures of reciprocation. Here subjects indicated they tried harder to be a good supervisor, felt they did a better job as supervisor, and tried to be more helpful to their worker when the intention manipulation was absent. The means were in the same direction but not significant on the remaining question, dealing with enjoyment of the supervisor role. On none of these questions was the difference between intent-to-help and intent-to-not-help conditions significant. Apparently, knowledge of the O's intentions, regardless of the content of the intent, produced a negative affect toward the situation when P was in control (i.e., the supervisor). Interestingly, when P was the worker and had just received the intention manipulation, knowledge of O's intent did not affect responses to questions on the Worker Form dealing with how hard P worked, how good a job she did, or her enjoyment.

To review briefly, subjects were first assigned to the worker role and received an intent manipulation from their supervisor. This manipulation appeared successful and did not affect other perceptions of the situation. Subjects then found out how much help they actually received from O, were then placed in the supervisor role, and given the opportunity to reciprocate. Reciprocation was based on amount of help actually received rather than intentions of O, although knowledge of O's intent, regardless of what the intent was, produced a negative affect for the subjects.

While the present study differed from other research on intention with regard to the manner in which the intentions were made known to P, stated rather than inferred, another difference was also present which may have confounded the present results. When O's intentions are inferred by P, P probably does not think O is aware that P has made this

inference. When O orally states his intent to P, P is certain that O is aware of what P knows. The subjects in the present study may have felt pressured by such a direct and explicit communication of intent. Brehm (1966) has addressed himself directly to this point in his theory of psychological reactance. He has postulated that individuals like to have the freedom to behave as they choose, and that when this freedom is threatened or reduced, a reactance motive is aroused which directs them to re-establish their freedom. With regard to Study II subjects wish to decide for themselves whether or not and to what degree they should help O. When intentions are inferred, the knowledge is valuable in making this decision; however, when O tells P his intent, the knowledge pressures P to reciprocate intent. P is no longer completely free to do as he wishes; he is obliged to reciprocate the intent. It is when P has the opportunity to reciprocate that reactance motivation is greatest. This is reflected in negative affect toward the situation and results in ignoring the intent information altogether--P reciprocates solely on the basis of O's actual previous helping behavior.

Study III was carried out to examine the possibility that reactance led subjects to ignore O's intentions in Study II. Study III was identical to Study II except that the intention manipulation, while stated, was done in such a manner that P believed O was unaware of P's knowledge of O's intent. Other differences in Study III involved clarifying the first reciprocation measure and always giving P the opportunity to reciprocate A, the person who had previously helped her.

STUDY III

METHOD

Design and Subjects

The subjects were sixty female undergraduate volunteers who were randomly assigned to one of the six cells of a 3 x 2 factorial design. The independent variables were O's intent (help, not help, or absent) and O's actual helping behavior (high or low help). Differences in target of reciprocity, A or B, was not included.

Procedure

The procedure was identical to that of Study II with the following exceptions.

Intention Manipulation. After informing each subject that she was to be the worker on the first task, the experimenter gave the subject a copy of the proofreading task and one of three different forms which had presumably just been completed by her "supervisor". The form contained several biographical items which were identical on all forms and an open-ended question, "What is your attitude towards your workers?" Subjects in the intend-to-help condition received a form which read, "I feel that I will try very hard to help my workers do well. I want them to do well." For subjects in the intention absent condition the response read, "I haven't had enough experience with my workers to be able to form an attitude." The intent-to-not-help response was, "I feel that I'll have a hard time helping my workers. I don't care how well they do." Subjects were told that, "When she filled the form out, your supervisor did not know

that you were going to see it. But in industrial situations the workers often know much more about a supervisor than the supervisor knows about each individual worker."

Task I was administered by playing the neutral intention manipulation tape from Study II.

Reciprocity Measure I. The instructions read by the experimenter were more explicit. Subjects were informed that, "Your job as supervisor will not be affected by the level of job difficulty you choose for your worker. However, your worker will have to work harder on the more difficult task, making it less likely that she will earn the full five research participation credits . . ."

RESULTS

Effectiveness of the Intention Manipulation

As in Study II, this was assessed by responses to the question, "To what extent do you feel your supervisor tried to be helpful?" Again the effect for intentions was significant ($F=8.60$, $df=2/54$, $p < .01$) with the means in the expected direction (help=4.70, intent-absent=3.80, not-help=2.25). The only other item on the Worker Form to show a significant effect due to intention was, "How good a job do you feel you did on the task?" ($F=4.17$, $df=2/54$, $p < .05$; $\bar{X}_{help}=4.00$, $\bar{X}_{no\ intent}=2.65$, $\bar{X}_{not\ help}=2.20$).

Reciprocity

The first measure of reciprocity, level of task difficulty chosen for other, as expected, was more sensitive to O's intent than her actual helping behavior. The findings are presented in Table 5. The main effect of intention approached significance ($F=2.40$, $df=2/54$, $p < .10$), while the effect of actual behavior and the interaction were not significant ($F=0.71$ & $F=0.18$). The difference between the intent to help and intent to hinder conditions were significantly different ($t=2.17$, $df=18$, $p < .05$).

The second measure of reciprocity, number of credits assigned to the worker, as expected, was more sensitive to the other's actual behavior toward the subject. These findings are presented in Table 6. The effect of the other's actual behavior was highly significant ($F=69.46$, $df=1/54$, $p < .001$), while the effects of the other's intentions were insignificant ($F=1.73$). The interaction was not significant ($F=0.49$).

The correlation between the two measures of reciprocity was again non-significant ($r=-.14$).

Supervisor Form Responses

Two of the four questions on the Supervisor Form yielded significant effects. These were, "How hard did you try to be a good supervisor?" and "How helpful did you try to be to your worker?" On each of these questions there was a significant main effect of intention and a significant interaction. All four of these significant effects were at the .05 level. The intention effects indicated subjects tried harder and felt

they were more helpful when O's intent had been to help than either not to help or absent. The interactions indicated that when O actually gave a lot of help, subjects tried equally hard and felt they were equally helpful in the different intention conditions; but when O had actually given little help subjects tried harder and felt they were more helpful when the other's intent had been to help than when the other had tried not to help or in the intent absent condition.

DISCUSSION

The main conclusion from the present research appears to be that stated intentions function much like intentions that are inferred from situational constraints on O and O's behavior when P believes O is unaware of P's knowledge. When O directly tells P his intent, P tends to ignore such information and reciprocates O's earlier aid solely on the basis of the amount of prior aid received; when P learns O's stated intent, but from a source other than O directly, both intent and actual aiding behavior are used as the basis of reciprocation.

We have interpreted this finding within Brehm's (1966) reactance framework. We assumed that subjects like to know O's intent, since this gives them important information as regards the amount of help they will return O. However, they like to gain this information in such a way that does not obligate them to return a specified amount of aid. When O states his intent directly and explicitly to P, the norm of reciprocity (Gouldner, 1960) demands P intend the same. Such a demand restricts P's freedom to do otherwise, and P restores his freedom by completely ignoring O's intent when P actually reciprocates.

There are, however, other possible interpretations of this finding. It may be that the intent of O is more easily forgotten when P hears it than when P has to make a more active effort in inferring it or reading it. Thus intent of O has no effect when directly stated because it has been forgotten. However, responses to the supervisor form, filled out between the two reciprocity measures, showed sizeable effects due to O's intent and suggests the lack of effect for intent on the reciprocity measures in Study II was therefore due an active discounting process.

Another reason for discounting the intention information in Study II might be that it was not credible for a person to so openly state his intent so blatantly. Although there is no direct information on this point, the fact that the means for the question on the worker form, "How hard do you think your supervisor tried to be helpful," yielded nearly equivalent results for Study II and Study III suggests the intention manipulation was equally effective in the two studies.

A final possibility is that subjects in Study II wondered why O would state her intentions and questioned her motives for doing so. It may be that subjects felt O was trying to ingratiate herself in the intent-to-help condition and trying to appear "sophisticated" or "above it all" in the intent-to-not-help condition. Such inferences might lead subjects to attribute different characteristics to O which would influence later reciprocation to O. While we have no evidence on this point, it would appear one worthy of further effort. The statement of one's intent directly not only gives a person information about the other's intent but also tells him the other is the kind of person who gives out such information and this

could have an effect on reciprocation.

A second conclusion from the present research is that different measures of help-giving are not always equivalent. One measure in the current project, difficulty of task chosen for O, was more sensitive to O's prior intent, while the other measure, "payment" to O for her work, was more sensitive to O's actual past helping behavior. In neither study were the two measures significantly correlated. This suggests that intent and actual behavior do not summate into a total amount of help giving, but that each is reciprocated in turn--when O intended to help, P reciprocates the intent by selecting a less difficult task; when O actually helps, P reciprocates the aid by awarding O greater "payment". It is suggested that future research not be satisfied with only a single measure of reciprocity.

The hypothesis from study II--that P would more likely reciprocate the intent of O when O was later the person in need of aid, while P would be more likely to reciprocate O's actual behavior when the target of reciprocation was a stranger--remains untested since this variable was only manipulated in Study II where intent had no effect on reciprocity. Reciprocity was more extreme when the target of reciprocity was the same person who previously helped P, a result similar to that of Greenglass (1969).

CONCLUSIONS AND RECOMMENDATIONS

The findings from the three studies are summarized in outline form below.

a) People do reciprocate a favor from another and retaliate another's harm.

b) Males are more likely to retaliate another's harm than are females, but no sex differences appear when returning a favor.

c) People do not reciprocate and retaliate to the extent predicted by equity theory. There appears to be a preference for situations in which rewards are divided equally rather than equitably.

d) When the other person first divides the rewards equally, a person also divides the rewards equally when they have the opportunity.

e) The abilities and qualifications (inputs) of the interacting persons have only minor effects on reciprocation and retaliation.

f) When overpaid by another, males like him more, feel he worked harder, and reciprocate the aid more when the other male is poorly qualified. Females, under the same conditions, like the other more, feel she worked harder, and reciprocate her aid more when the other is highly qualified.

g) When underpaid by another, males feel the highly qualified other worker works harder and retaliates less towards him. Females, when underpaid, like the poorly qualified other more and retaliate less towards her.

h) When equally paid, males feel the highly qualified other worked harder and liked him more, while females feel the poorly qualified other worked harder and liked her more.

i) People are more likely to reciprocate a prior helper than a stranger, but will help a stranger if they were previously given much help than little help.

j) If the other person's intent is directly stated to a person, the person is likely to ignore the other's intent when the opportunity to

reciprocate occurs.

k) Hearing the other person directly state his intent makes a person uncomfortable and leads him to work less hard.

l) Discovering the other person's intent in such a way that the person does not believe the other is aware he knows his intent, leads to reciprocation based, at least in part, upon the intent.

m) The intent and the actual behavior of another contribute to different aspects of the reciprocation situation.

Perhaps the best recommendation that can be gleened from this research is that people prefer conditions in which reciprocation and retaliation are not necessary, that is, situations in which equality prevails. Obviously, such a perfect world is not possible. People do bestow favors on others and do harm to others; some people are capable of rewarding and hurting others while others are not. The research suggests that when help is given or harm inflicted upon another, the intentions of the help-giver or harm-doer are important determinants as to whether reciprocation will occur. A potential help-giver or harm-doer should not directly and explicitly state how much help or harm he intends to do. Such statements appear to make people uncomfortable, apparently because they imply how much a person should reciprocate and take away his freedom to decide for himself. A better tactic would be for a potential help-giver or harm-doer to make his intentions known indirectly, either through his behavior or through a third person. The research suggests that indirect intentions are as important as whether help or harm actually occurs with regards to reciprocation and retaliation.

The research reported here has all been of the laboratory variety. What appears to be needed now is an attack on two fronts: continued laboratory research into topics such as situational effects on retaliation and reciprocation, and field research to explore the naturalistic conditions under which the laboratory findings held.

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FOOTNOTES

[1]The findings by Nemeth (1970) listed under points (2) and (5) occurred for female subjects but not for males.

[2]To our knowledge the relationship between voluntary and compulsory hindrance by A and later helping towards A has not been examined.

[3]Although almost all of the experiment's instructions were pre-recorded the subjects were not aware of it. As far as they knew the whole thing was live.

[4]All questionnaire responses in both studies were on 8-point scales anchored only at the extremes.

[5]The other quesions were, "How hard did you work on the task?" "How good a job did you feel you did on the task?" and "How enjoyable did you find the task?"

Table 1

Perception of Fairness of the Division of Reward When Other Divided Money[1]

	Payment Conditions			
	Overpaid	Equally Paid	Underpaid	Average
Males	1.80[a]	4.35[b]	7.50[d]	4.55
Females	1.95[a]	4.70[b]	6.25[c]	4.30
Average	1.87	4.52	6.87	

[1]The higher the value the more S felt other got too much; the lower the value the more S felt he got too much.

Note--cells with the same superscript are not significantly different at the .05 level by Newman-Keuls.

Table 2

Amount of Reward Kept for Self on Task Two

	Payment Conditions			
	Overpaid	Equally Paid	Underpaid	Average
Males	39.75[a]	56.00[b]	73.25[d]	56.33
Females	39.05[a]	55.70[b]	64.85[c]	53.20
Average	39.40	55.85	69.05	

Note--cells with the same superscript are not significantly different at the .05 level by Newman-Keuls.

Table 3

Number of Credits Assigned to Worker

Worker Identification	Prior High Help	Prior Low Help	Average
Prior Helper (A)	4.27_{a}	2.70_{b}	3.48
Not Prior Helper (B)	3.77_{ac}	3.03_{bc}	3.40
Average	4.02	2.87	

Note--cells containing a like superscript are not significantly different at the .05 level by Newman-Keuls.

Table 4

Responses to Supervisor Form as a Function of Past Helper's Intent

Question[1]	Intent					
	Help	No Intent	Hinder	F	df	P
1	5.25_{a}	6.07_{b}	5.05_{a}	5.20	2/108	.01
2	2.77_{ab}	3.57_{b}	2.62_{a}	3.36	2/108	.05
3	3.85_{a}	4.37_{a}	3.52_{a}	1.78	2/108	ns
4	4.87_{ab}	5.62_{a}	4.32_{b}	4.49	2/108	.05

[1]See text of article for question content.

Note--within rows, cells containing a like subscript are not significantly different at the .05 level by Newman-Keuls.

Table 5

Level of Task Difficulty Chosen by Subject[1]

(Reciprocity Measure I)

	INTENT			
Actual Behavior	Help	Intent Absent	Not Help	Average
High Help	2.40	2.80	3.20	2.80
Low Help	2.40	3.30	3.70	3.13
Average	2.40	3.05	3.45	

[1]The higher the number, the greater the difficulty.

Table 6

Number of Credits Assigned to Other

(Reciprocity Measure II)

	INTENT			
Actual Behavior	Help	Intent Absent	Not Help	Average
High Help	4.40	3.70	4.20	4.10
Low Help	2.20	2.00	2.40	2.20
Average	3.30	2.85	3.30	

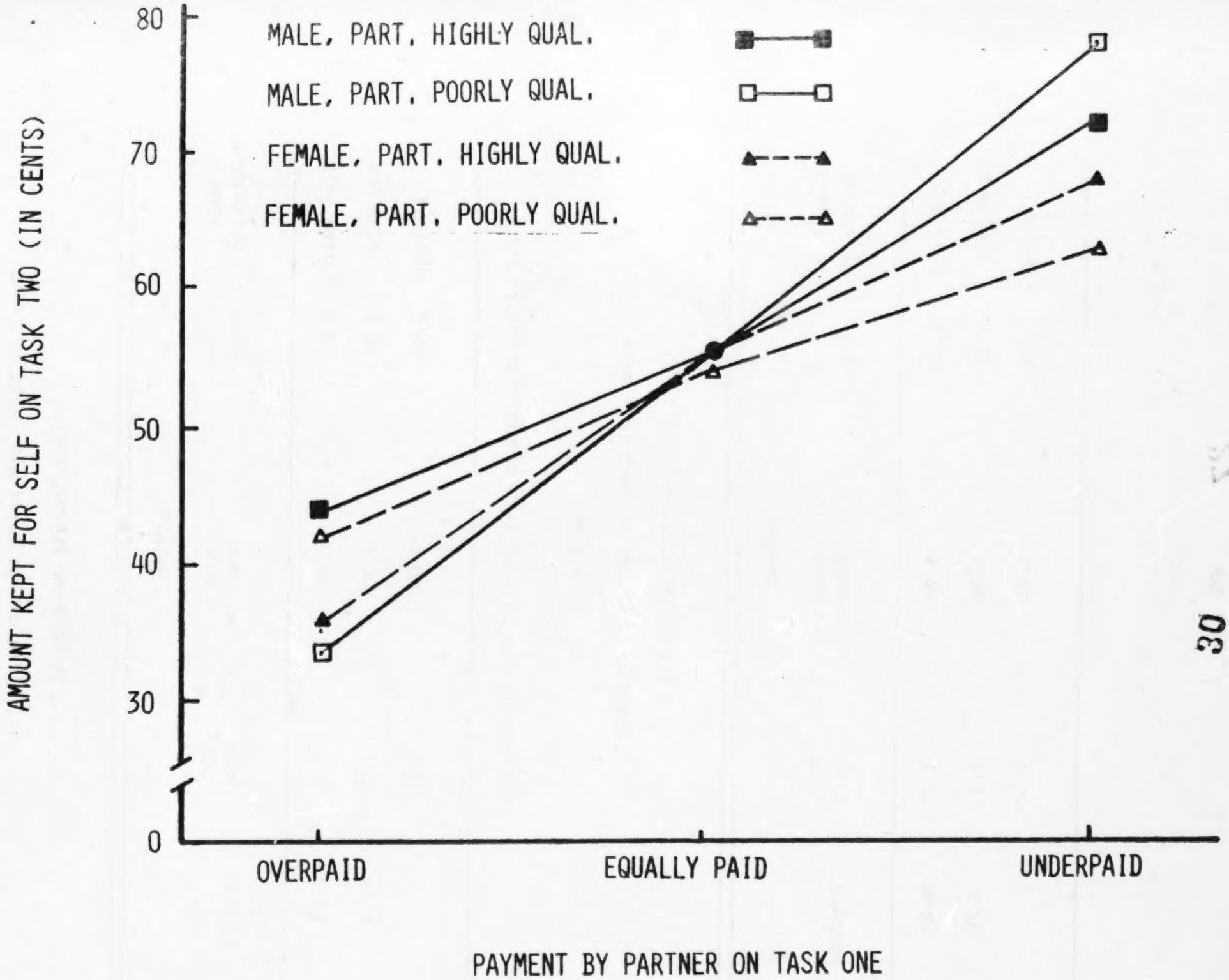

Figure 1. Amount of money kept for self on trial two as a function of payment condition, sex, and partner's qualifications.